

## ABSTRACT

Novel uses for WIPK, a member of the mitogen-activated protein (MAP) kinase family, are provided, based on the discovery that the WIPK protein is activatable in association with development or enhancement of resistance to microbial pathogens. Thus, WIPK may play a critical role in signal transduction for activation of plant defenses against certain microbial pathogens. Methods are disclosed for making WIPK transgenic plants with enhanced resistance to disease causing agents. In addition, transgenic plants transformed with WIPK and having enhanced disease resistance are disclosed.